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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/527,546 | 03/16/2000 | Michael J. Conrad | 202812 | 2335 |

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| EXAMINER |
|---|
| PARTON, KEVIN S |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2153 | 6 |

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/527,546 | CONRAD ET AL. | |
| | Examiner | Art Unit | |
| | Kevin Parton | 2153 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 04/10/2003 have been fully considered but they are not persuasive. Please see the following reasons and the restated grounds of rejection below.

2. Applicant argues "In rejecting claim 1...other cited references" (page 3, paragraph 2 – page 4, paragraph 1). More specifically, the applicant argues "The Office Action failed to point to any place in the Desai et al. (USPN 5,781,703) reference that teaches the Intelligent Remote Agents are plug-ins." The argument is not persuasive because the applicant assumes a definition for the term plug-in but the definition is not included specifically in the limitations of the claims. The fact that Intelligent Remote Agents (IRAs) may be defined as computer programs does not distinguish the claims from the reference. A plug-in of any type will be a piece of software, as are the IRAs. Additionally, IRAs are pieces of software that run to support the operation of the client or its component and multiple IRAs can be running on an individual client or its component at any time, this makes it a type of plug-in. The reference anticipates the current invention as claimed and described in the grounds of rejection below.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-9, 11-13, 15-17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Desai et al. (USPN 5,781,703).

5. Regarding claim 1, Desai et al. (USPN 5,781,703) teach a system for network performance reporting comprising:

a. A reporting server (figure 1). Note that in the reference, the reporting server is the proxy controller that collects information from the remote agents and sends them commands from the data server. Note that the proxy controller (reporting server) and the data server can be either separate machines or separate pieces of software.

b. A plurality of reporting clients for collecting system performance data and reporting the system performance data to the reporting server (figure 1), each reporting client having a plug-in module for registering performance metrics for a system component with said each reporting client (column 4, lines 1-4) tracking the performance metrics (column 4, lines 8-10), and passing data on the performance metrics to the reporting client for reporting to the reporting server (column 4, line 10), the reporting server programmed to generate a performance report based on system performance data reported by the reporting clients (column 2, lines 15-17; column 11, lines 27-30). Note that in the reference, Intelligent Remote Agents are provided to clients as plug-ins. They each monitor a set of performance characteristics of the associated machine. Using that machine's communication methods, the data is sent back to the reporting server

(proxy controller). The proxy controller then formats the information into the proper format (database).

6. Regarding claim 2, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 1. They further teach means wherein each of the reporting client includes a client application for selectively tracking a core set of system attributes (column 4, lines 8-10; column 6, lines 17-20). Note that in the reference, the Intelligent Remote Agents that execute on the client operate to collect different types of performance data.

7. Regarding claim 3, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 1. They further teach means for including a reporting super-server for receiving system performance data from the reporting server and summarizing the system performance data received from the reporting server to generating a second performance report (column 3, lines 13-36). Note that in the reference, the Data Server is the ultimate destination for the performance data sent by way of the reporting server or proxy controller. The Data Server formats and stores the data and can generate any type of report from the SQL database.

8. Regarding claim 4, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 1. They further teach means including a data store for selectively archiving system performance data (column 3, lines 13-36). Note that in the reference, both the proxy controller and the data server are responsible for storing some amount of performance data. The proxy controller may remove unnecessary data in the data formatting process.

9. Regarding claim 6, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 1. They further teach means wherein the plug-in module of at least one of the reporting clients is programmed to register with said at least one reporting client an indication of how the data on the performance metrics are to be presented in the performance report generated by the reporting server (column 6, lines 45-50, 62-65). Note that in the reference, the Intelligent remote Agent responds with data that meets any of the situational requirements, thereby affecting the presentation of any report.

10. Regarding claim 7, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 1. They further teach means wherein the performance report generated by the reporting server includes a summary summarizing status of system components monitored by the reporting clients and a plurality of per-client detailed reports regarding the reporting client (column 3, lines 43-45; column 4, lines 1-10). Note that in the server information on each client is summarized into a report and sent to the data server by the proxy controller. This information includes statistics gathered by the client as well as client specific details.

11. Regarding claim 8, Desai et al. (USPN 5,781,703) teach a system for generating performance reports with means for:

a. Connecting a reporting server with a reporting client, the reporting client responsible for monitoring a system component and having a plug-in module for tracking metrics specific to the system component (figure 1; column 4, lines 1-4). Note that in the reference, the proxy controller is a reporting server and the Remote Intelligent Agents are plug-ins used for monitoring metrics on the client machines.

b. Registering, by the plug-in module with the reporting client, the metrics for reporting to the reporting server (column 6, lines 10-20, 40-65). Note that in the reference, the metrics to be measured are analyzed by the remote agents and only those that can be satisfied are reported, and thus "registered" with the proxy controller.

c. Tracking, by the plug-in module, the metrics and providing data on the metrics to the reporting client (column 6, lines 43-45). Note that in the reference, the remote intelligent agents collect data and then use the client's communications to provide that data back to the proxy controller.

d. Passing, by the reporting client, performance data including the data on the metrics to the reporting server (column 6, lines 45-47).

e. Generating, by the reporting server, a performance report from the performance data passed by the reporting client (column 2, lines 15-20; column 3, lines 43-45). Note that in the reference, the proxy controller generates a SQL compatible "report" with the information that was sent and stores it until further communication is requested.

12. Regarding claim 9, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 8. They further teach means including the step of tracking by the reporting client a core set of system attributes, and wherein the performance data passed by the reporting client to the reporting server includes data on the core set of system attributes (column 6, lines 10-20). Note that in the reference, all collection is done by request of the data server. The data server has a pre-determined set of core client

attributes that must be collected. The attributes are communicated to the remote intelligent agents.

13. Regarding claim 11, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 8. They further teach means including the step of forwarding, by the reporting server, performance data to a reporting super-server (column 3, lines 13-36). Note that in the reference, the Data Server is the ultimate destination for the performance data sent by way of the reporting server or proxy controller. The Data Server formats and stores the data and can generate any type of report from the SQL database.

14. Regarding claim 12, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 8. They further teach means including the step of selectively archiving performance data in a data store (column 3, lines 13-36). Note that in the reference, both the proxy controller and the data server are responsible for storing some amount of performance data. The proxy controller may remove unnecessary data in the data formatting process.

15. Regarding claim 13, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 8. They further teach means wherein the step of registering the metrics includes providing an indication of how the data on the metrics are to be presented in the performance report generated by the reporting server (column 6, lines 10-20, 40-65). Note that the remote intelligent agents only collect those metrics that satisfy the situational requirements thus determining the manner in which the information will be reported.

16. Regarding claim 15, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 8. They further teach means including the step of providing, by the

plug-in module, non-numeric performance data concerning the system component being monitored (column 6, lines 10-20). Note that in the reference, any type of performance parameter can be measured, this could include non-numeric values such as yes/no answers to performance threshold measurements.

17. Regarding claim 16, Desai et al. (USPN 5,781,703) teach a system for network performance monitoring with means for:

a. Registering, by the plug-in module, metrics for monitoring performance of a system component on a host computer of the reporting client (column 6, lines 10-20, 40-65). Note that in the reference, the metrics to be measured are analyzed by the remote agents and only those that can be satisfied are reported, and thus "registered" with the proxy controller.

b. Tracking, by the plug-in module, the metrics during operation of the host computer (column 6, lines 43-45). Note that in the reference, the remote intelligent agents collect data and then use the client's communications to provide that data back to the proxy controller.

c. Providing, by the plug-in module, data on the metrics from the tracking (column 6, lines 45-47). Note that in the reference, the remote intelligent agent uses the client's communication infrastructure to send the data, so the data is provided to the client.

d. Forwarding, by the reporting client, the data on the metrics to a reporting server for generating a performance report (column 6, lines 45-47).

18. Regarding claim 17, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 16. They further teach means wherein the step of registering the metrics includes providing an indication of how the data on the metrics are to be presented in the performance report (column 6, lines 10-20, 40-65). Note that the remote intelligent agents only collect those metrics that satisfy the situational requirements thus determining the manner in which the information will be reported.

19. Regarding claim 19, Desai et al. (USPN 5,781,703) teach all the limitations as applied to claim 16. They further teach means for collecting, by the reporting client, data on a core set of system attributes, and providing the collected data on the core set of system attributes to the reporting server for generating the performance report (column 6, lines 10-20). Note that in the reference, all collection is done by request of the data server. The data server has a pre-determined set of core client attributes that must be collected. The attributes are communicated to the remote intelligent agents.

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. Claims 5, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al. (USPN 5,781,703) in view of Hamilton, III et al. (USPN 6,098,181).

22. Regarding claims 5, 14, and 18, although the system disclosed by Desai et al. (USPN 5,781,703) (as applied to claims 1, 8, and 16) shows substantial features of the claimed invention, it fails to disclose means wherein the plug-in module is programmed

to provide data indicating a pass/fail status of a system component monitored by the at least one reporting client for inclusion in the performance report generated by the reporting server.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Desai et al. (USPN 5,781,703), as evidenced by Hamilton, III et al. (USPN 6,098,181).

In an analogous art, Hamilton, III et al. (USPN 6,098,181) disclose a system for monitoring of performance of remote network elements. They teach means wherein the plug-in module is programmed to provide data indicating a pass/fail status of a system component monitored by the at least one reporting client for inclusion in the performance report generated by the reporting server (figure 2). Note that in the reference, the primary returned value is a pass/fail attribute of a monitored node.

Given the teaching of Hamilton, III et al. (USPN 6,098,181), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Desai et al. (USPN 5,781,703) by employing the use of a pass/fail indicator as one of the returned performance results. This would benefit the system by giving the most simple and easily read indication of nominal system status. In addition, action could be taken more quickly at a higher level if the returned attribute were portrayed in the simplest possible manner.

23. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al. (USPN 5,781,703) in view of Haggard et al. (USPN 6,148,335).

24. Regarding claim 10, although the system disclosed by Desai et al. (USPN 5,781,703) (as applied to claim 8) shows substantial features of the claimed invention, it

fails to disclose means wherein the core set of system attributes includes memory usage and event log errors.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Desai et al. (USPN 5,781,703), as evidenced by Haggard et al. (USPN 6,148,335).

In an analogous art, Haggard et al. (USPN 6,148,335) discloses a system for remote monitoring and reporting of network elements with means wherein the core set of system attributes includes memory usage and event log errors (column 2, lines 62-65). Note that in the reference, errors are reported and memory availability (or conversely, usage) is reported.

Given the teaching of Haggard et al. (USPN 6,148,335), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Desai et al. (USPN 5,781,703) by employing the reporting of memory status and event messages to the server. These are only two examples of a number of advantageous metrics that can be recorded. The benefit to the system would be the constant knowledge of the amount of memory in use and available in order to make decisions on where more memory must be added, or where memory leaks may exist.

***Conclusion***

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-9242 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Kevin Parton
Examiner
Art Unit 2153

ksp
July 30, 2003

Dung C. Dinh
Primary Examiner